



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/975,895

10/12/2001

Mark D. Penk

A-7485

1171

5642

7590

10/23/2006

SCIENTIFIC-ATLANTA, INC.  
INTELLECTUAL PROPERTY DEPARTMENT  
5030 SUGARLOAF PARKWAY  
LAWRENCEVILLE, GA 30044

EXAMINER

ENGLAND, DAVID E

ART UNIT

PAPER NUMBER

2143

DATE MAILED: 10/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/975,895

Applicant(s)

PENK ET AL.

Examiner

David E. England

Art Unit

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply.

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 16 - 63 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16 - 63 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

PC

### DETAILED ACTION

1. Claims 16 – 63 are presented for examination.

#### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 16 – 20, 22 – 29, 32, 33, 35 – 42 49 – 53, 57, 58, 61 and 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rakib et al. U.S. Patent No. 6889385 (hereinafter Rakib) in view of Kenner et al. (6112239) (hereinafter Kenner).**

4. Referencing claim 16, as closely interpreted by the Examiner, Rakib teaches a method for enabling a receiver in a digital subscriber network to request services provided by the digital subscriber network, the method comprising the steps of:

5. receiving a dynamic network information table at the receiver, (e.g., col. 9, line 41 – col. 10, line 22, “*menu*”); and

6. transmitting a request for a service, the requested service including at least a portion of the information included in the dynamic network information table, (e.g., col. 9, line 41 – col. 10, line 22), but does not specifically teach the dynamic network information table including one or more device-specific subtables, each device-specific subtable including information associated

Art Unit: 2143

with transmission characteristics of a device upstream from the receiver. Kenner teaches one or more device-specific subtables, each device-specific subtable including information associated with transmission characteristics of a device upstream from the receiver, (e.g., col. 18, line 51 – col. 19, line 16). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Kenner with Rakib because splitting a network table into subtables would alleviate a table from becoming too large and overburdened with requests. Therefore, utilizing subtables can alleviate request for information from a main table or database.

7. Referencing claim 17, as closely interpreted by the Examiner, Rakib teaches identifying from the dynamic network information table and upstream device associated with the requested service, (e.g., col. 9, line 41 – col. 10, line 22); and

8. including the identification of the associated device in the transmitted request for the service, (e.g., col. 9, line 41 – col. 10, line 22).

9. Referencing claim 18, as closely interpreted by the Examiner, Rakib teaches identifying a controller associated with the identified upstream device, (e.g., col. 9, line 41 – col. 10, line 22, “*cherry picker*”);

10. wherein transmitting the request for the service includes transmitting the request to the controller, (e.g., col. 9, line 41 – col. 10, line 22).

Art Unit: 2143

11. Referencing claim 19, as closely interpreted by the Examiner, Rakib teaches determining a communication path through the digital subscriber network for the requested service, (e.g., col. 10, line 23 – col. 11, line 11); and

12. including the communication path in the transmitted request for the service, (e.g., col. 10, line 23 – col. 11, line 11).

13. Referencing claim 20, as closely interpreted by the Examiner, Rakib teaches the communication path is determined based upon network information included in the received dynamic network information table, (e.g., col. 9, lines 8 – 40).

14. Referencing claim 22, as closely interpreted by the Examiner, Rakib teaches the dynamic network information table includes information associated with a plurality of upstream devices, (e.g., col. 38, line 37 – col. 39, line 43).

15. Referencing claim 23, as closely interpreted by the Examiner, Rakib teaches the dynamic network information table includes network information from a source of a network transport stream, (e.g., col. 10, line 23 – col. 11, line 11).

16. Referencing claim 24, as closely interpreted by the Examiner, Rakib teaches the dynamic network information table is included in a transport stream received at the receiver, (e.g., col. 10, line 23 – col. 11, line 11).

Art Unit: 2143

17. Referencing claim 25, as closely interpreted by the Examiner, Rakib teaches the dynamic network information table is included in a packet having a reserved packet identifier associated therewith, (e.g., col. 10, line 23 – col. 11, line 11).

18. Referencing claim 26, as closely interpreted by the Examiner, Rakib teaches the packet is a program association table packet, (e.g., col. 10, line 23 – col. 11, line 11).

19. Referencing claim 29, as closely interpreted by the Examiner, Rakib teaches the requested service is a pay-per-view program and the device is a VOD server having the requested program stored therein, (e.g., col. 2, lines 25 – 31 & col. 51, lines 37 – 67).

20. Referencing claim 33, as closely interpreted by the Examiner, Rakib teaches the at least one device is a plurality of devices, and further including the step of:

21. using information included in the receive network information to determine which particular device of the plurality of devices shall transmit the requested service to the receiver, (e.g. col. 37, line 40 – col. 38, line 25); and

22. wherein the step of providing further includes:

23. sending a message to the particular device to initiate transmission of the requested service, (e.g. col. 37, line 40 – col. 38, line 25).

24. Referencing claim 36, as closely interpreted by the Examiner, Rakib teaches the processor is adapted to include the network information in a second transport stream, and the

Art Unit: 2143

transmitter is adapted to transmit to second transport stream, (e.g., col. 38, line 52 – col. 39, line 24, “*upstream and downstream*”).

25. Referencing claim 37, as closely interpreted by the Examiner, Rakib teaches the second transport stream includes multiple elementary streams of the first transport stream, (e.g., col. 38, line 52 – col. 39, line 24, “*channels and subchannels*”).

26. Referencing claim 50, as closely interpreted by the Examiner, Rakib teaches the network information includes a transport stream identifier (TSID) for the received transport stream, (e.g., col. 10, line 43 – col. 11, line 11).

27. Claims 27, 28, 32, 35, 38 – 42, 49, 51 – 53, 57, 58, 61 and 63 are rejected for similar reasons as stated above.

28. **Claims 21, 30, 31, 34 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rakib and Kenner in view of Addington (6928656).**

29. As per claim 30, as closely interpreted by the Examiner, Rakib and Kenner do not specifically teach the network information includes information related to the available bandwidth through at least one communication link of the digital subscriber network. Addington teaches the network information includes information related to the available bandwidth through at least one communication link of the digital subscriber network, (e.g., col. 6, lines 49 – 61). It

Art Unit: 2143

would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Addington with the combine inventions of Rakib and Kenner because sending bandwidth data between servers and client while setting up a connection would set the parameters of the network connections so that proper allocation of bandwidth can be utilized across the network devices.

30. Referencing claim 31, as closely interpreted by the Examiner, Rakib teaches the network information includes information related to a device associated with requested service, and the device and the receiver are coupled by a first communication link that includes the at least one communication link and the receiver, (e.g., col. 10, line 23 – col. 11, line 11).

31. Claims 21 and 34 are rejected for similar reasons as stated above.

**32. Claims 43 – 47, 59, 60 and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rakib and Kenner in view of Nobakht et al. (6813639) (hereinafter Nobakht).**

33. As per claim 43, as closely interpreted by the Examiner, Rakib and Kenner do not specifically teach the received transport stream includes a second dynamic network information table, the second dynamic network information table includes network information related to a second transport stream and includes an identifier associated with a second apparatus, and

Art Unit: 2143

wherein the processor is adapted to include at least a portion of the second dynamic network information table in the first dynamic network information table.

34. Nobakht teaches the received transport stream includes a second dynamic network information table, the second dynamic network information table includes network information related to a second transport stream and includes an identifier associated with a second apparatus, and wherein the processor is adapted to include at least a portion of the second dynamic network information table in the first dynamic network information table, (e.g. col. 11, lines 29 – 64 & Figure 10). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Nobakht with the combine inventions of Rakib and Kenner because grouping channels into different tables by category, i.e. sports, weather, news, would give the user the ability to view all specific channels of that specific group and not have to scan through other channels that do not interest the user at the time of selection.

35. As per claim 44, as closely interpreted by the Examiner, Rakib and Kenner do not specifically teach the second dynamic network information table is included in a program association table of the received transport stream. Nobakht teaches the second dynamic network information table is included in a program association table of the received transport stream, (e.g. col. 11, lines 29 – 64 & Figure 10). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Nobakht with the combine inventions of Rakib and Kenner because of similar reasons stated above.

36. As per claim 45, as closely interpreted by the Examiner, Rakib and Kenner do not specifically teach the processor is adapted to include the dynamic network information table in a second transport stream, and the transmitter transmits the second transport stream. Nobakht teaches the processor is adapted to include the dynamic network information table in a second transport stream, and the transmitter transmits the second transport stream, (e.g. col. 11, lines 29 – 64 & Figure 10). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Nobakht with the combine inventions of Rakib and Kenner because it is well known in the art that if a user selects an interest group, i.e. sports channels, from a table that is presented then a device would have to respond to the request and provide the interest group of channels to the user in another transport stream.

37. As per claim 46, as closely interpreted by the Examiner, Rakib and Kenner do not specifically teach the dynamic network information table is included in a program association table of the second transport stream. Nobakht teaches the dynamic network information table is included in a program association table of the second transport stream, (e.g. col. 11, lines 29 – 64 & Figure 10). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Nobakht with the combine inventions of Rakib and Kenner because of similar reasons stated above.

38. As per claim 47, as closely interpreted by the Examiner, Rakib teaches the transmitter is a plurality of transmitters, each transmitter having an identifier associated therewith, and the

Art Unit: 2143

processor is adapted to make a dynamic network information table having a transmitter identifier included therein for each transmitter, (e.g. col. 37, line 40 – col. 38, line 25).

39. Claims 59, 60 and 62 are rejected for similar reasons as stated above.

**40. Claims 48 and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rakib and Kenner in view of Nakamura et al. (5913039) (hereinafter Nakamura).**

41. As per claim 48, as closely interpreted by the Examiner, Rakib and Kenner do not specifically teach the processor is further adapted to monitor the first communication link and respond to changes in the first communication link by generating an alert message and sending the alert message to the transmitter, wherein the transmitter transmits the alert message through the second communication link.

42. Nakamura teaches the processor is further adapted to monitor the first communication link and respond to changes in the first communication link by generating an alert message and sending the alert message to the transmitter, wherein the transmitter transmits the alert message through the second communication link, (e.g. col. 10, line 28 – col. 11, line 13 & col. 11, line 35 – col. 12, line 7). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Nakamura with the combine inventions of Rakib and Kenner because once the server control unit gives the signal to the transmission video name in the transmission schedule table in job scheduling storage unit, the timer of the client in alarm

Art Unit: 2143

interrupt unit starts and therefore aiding in the scheduling of which data streams to store in a device.

43. Claim 56 is rejected for similar reasons as stated above.

**44. Claim 55 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rakib and Kenner in view of Pecus et al. (6886029) (hereinafter Pecus).**

45. As per claim 55, Rakib and Kenner do not specifically teach the network information includes bit error information. Pecus teaches the network information includes bit error information, (e.g., col. 30, lines 5 – 19). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Pecus with the combine inventions of Rakib and Kenner because utilizing a bit error rate allows the users node identify when a transmission is not complete and what packets need to be re-transmitted therefore allowing a complete transmission.

### ***Response to Arguments***

46. Applicant's arguments with respect to claims 16 – 63 have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 2143

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David E. England whose telephone number is 571-272-3912.

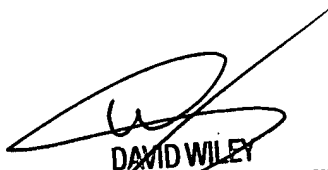
The examiner can normally be reached on Mon-Thur, 7:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on 571-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

David E. England  
Examiner  
Art Unit 2143

DE



DAVID WILEY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100